D3.1 Methodology of pilot testing and evaluation, and Guidelines for Community Managers

WP3 – Piloting at the Citylabs

30.11.2018

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Executive Summary

This document reports on the activities conducted in WP3 as part of Task 3.1 ("Defining the testing and evaluation methodology") and Task 3.2. ("Setting up community management for pilots"). The main goal of these activities is to support the whole process of piloting the Families_Share Platform within the 7 CityLabs. One of the main challenges of the Families_Share project is to provide guidance to the 7 CityLabs in order to activate local communities that will experiment innovative models for socialising childcare in different locations, that differ according to economic situation, societal models and, of course, cultural perspectives. Beside, an important goal is to conduct a longitudinal exploration of how local communities will use and adopt the Families_Share Platform.

This document comprises two main parts:

Part I. Methodology of pilot testing and evaluation. It presents the evaluation framework for the 1° pilot actions aimed at providing guidance to the 7 CityLabs to explore the User Experience (UX) of families and other stakeholders engaged at the local level. The documents includes guidelines, depicts methods and present common templates to conduct evaluations in the CityLabs, in order to gather comparable insights that will feed the re-design of the Families_Share Platform (part of WP2).

Part II. Guidelines for Community Managers. It presents the handbook that describes the lessons learnt extracted by the project´s partners in COKIDO (De Stuyverij) and NEXTHAMBURG (urbanista) in order to provide inspiring insights, hints and pitfalls to the Families_Share CityLabs.

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Introduction

This document reports on the activities conducted in WP3 as part of Task 3.1 ("Defining the testing and evaluation methodology") and Task 3.2. ("Setting up community management for pilots"). Activities goals are meant to support the whole process of piloting the Families_Share Platform within the 7 CityLabs. Task 3.1. is carried out in a strict and continuous dialogue with the other evaluative activities within the Project, in particular in synergy with WP1 activities (Task 1.2. related to parents needs analysis and Task 1.4. related to behavioral mapping) and WP4 activities related to the socio-economic and RRI impact assessment.

Intended audience

This document targets Families_Share consortium members in order to progress on the finalization of the design and the implementation of the first release of the Families_Share platform. It also contributes to the overall dissemination of the activities and the results of the project.

Document structure

The document is organized in two main parts:

Part I. Methodology of pilot testing and evaluation. It presents a framework for conducting evaluation studies to guide local CityLabs activities to gain comparable results on how parents and child care stakeholders in different geographic European regions use, feel and appropriate the Families_Share platform during and after the testing period.
This part describes the methodology to be used during the first pilot and presents methods and tools in order to allow all partners to be aligned in terms of methodological approaches. The deliverable also defines the time frame, methods of participatory activities, data gathering and documentations. It will be integrated with an update of the methodology to be used during the second pilot at M24 and included in D3.2.

Part II. Guidelines for Community Managers. this part presents the handbook that describes the lessons learnt extracted by the project´s partners in COKIDO (De Stuyverij) and NEXTHAMBURG (urbanista) in order to provide inspiring insights, hints and pitfalls to the Families_Share CityLabs.

Part I. Methodology of pilot testing and evaluation

1. Introduction

Part I of D3.1. describes the methodology for field trial and for participatory citizen involvement in the evaluation of the Families_Share platform. Evaluating the User Experience (UX) of the Families_Share platform is of paramount importance, considering its role in triggering and supporting digital social innovation on sharing childcare tasks, facilitating behavioural and social interaction among participating citizens, and encouraging parents to integrate new ways to socialize care tasks.

Families_Share embraces an understanding of innovation as the result of a continuous negotiation between the requirements emerging from citizens and community engaged and opportunities and constraints imposed by the rapid prototyping approach that will be pursued, thanks to the re-use of an available ICT platform. In this perspective, Families_Share encompasses an *evolutionary design approach* through which "users complete design as part of the appropriation process" (Carroll 2004). Technology is shaped not only throughout the design process, but it is also reshaped through concrete and local use.

The iterative approach for platform development exploited in Families_Share will guarantee platform adaptability across social and cultural contexts, enhancing citizens appropriation of the digital services. The pilots in the seven different CityLabs will allow the platform to be tested and adapted through the arrangement of two different iteration loops (Figure 1).

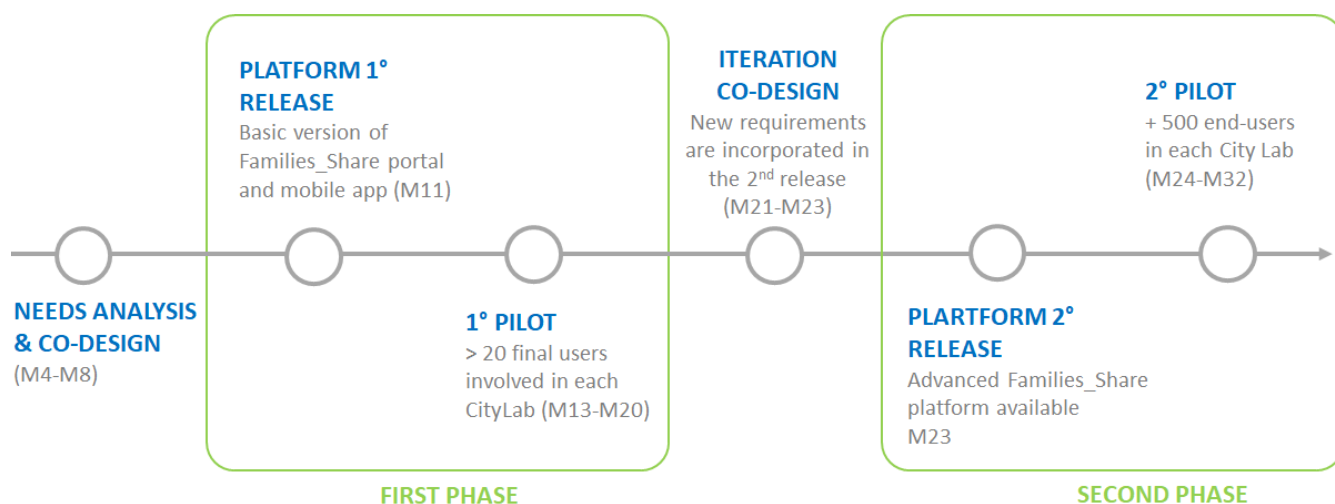*Figure 1. The iterative design lifecycle adopted in Families_Share*

First phase (M13 – M20)

The first phase will take care of evaluating the first release of the Families_Share platform (basic version), which has been developed according to the needs analysis performed in WP1, and according to the requirements described in D1.2. The evaluation performed in the first phase is focused on collecting feedback

from users that will drive the subsequent upgrading and adaptation of the platform to be developed in WP2. As shown in Figure 1, an iteration of co-design will be performed at M21- M23. Starting from data collected through the evaluation process, the advanced version of the Families_Share platform will be developed and further evaluated in the second evaluation phase.

Mixture of quantitative methods (log files, questionnaires) and qualitative methods (interviews, focus groups) will be used to engage at least 20 users per CityLab.

Second phase (M24 – M32)

Throughout the second iteration the final version of the platform will be tested, allowing us to perform a solid evaluation of the platform at the very end of the project. The iterative nature of the process and its integration with communication and awareness raising actions performed in WP5 will also ensure support to the social innovation dimensions, which will be triggered by the availability of the platform and evaluation of the impact Families_Share has had on social change. The second/final iteration (24-32) will involve 500 end-users per site (total 3.500 persons) and it will test the optimized version of the platform and the mobile application (released in Task 2.4) over a period of 13 months. The methodology will combine quantitative methods (log files, questionnaires) and qualitative methods (3 local meet ups with selected end-users per site- 40 participants each).

Key Performance Indicators

To summarize, we report in the following table the KPI related to piloting and evaluation activities (and Objective 2 - as reported in D6.1. Project Handbook and Data Management Plan).

Indicator No.	Obj.	Indicator name	Expected Progress M6	Expected Progress M12	Expected Progress M18	Expected Progress M24	Expected Progress M34 (Final)
10	O2	Number or registered users from the CityLabs by the end of the project	0	0	700	2200	4201
11	O2	Number of visitors returned to the platform	0	0	1000	1500	2001
12	O2	User performance and user satisfaction levels	0%	0%	50%	75%	95%
14	O2	Number of downloads of Families_Share app	0	0	300	300	1001
15	O2	Number of downloads of project open source outputs (fostering open innovation practices)	0	0	0	0	701

Table 1. KPIs related to piloting and evaluation activities

Starting from these premises and objectives, the following section elaborates a framework for conducting evaluation studies across the 7 CityLabs in the first pilot.

2. Goals, target groups and timeline

2.1. Measuring the User Experience (UX) of collaborative platforms and mobile applications

The overall goal is to provide methods and tools to investigate the user experience (UX) with the Families_Share platform and mobile application developed as part of WP2. The main goal is to gain insights during and after the testing period on how parents and childcare stakeholders in different geographic European regions feel about using the platform.

User Experience (UX) is an umbrella term, often used interchangeably with terms such as "User Interface Design" and "Usability". However, while Usability and User Interface Design are important aspects of UX Design, they are subsets of it – UX design covers a vast array of related topics. UX studies do not only focus on task related aspects but also on affective qualities, sensation, meaning and value of interactive systems, products and services (Adikari 2011).

There is no single definition of a good user experience. Instead, a good user experience is one that meets a particular user's needs in the specific context where he or she uses the product. In Families_Share, the dimensions to be investigated are related to the specific goals of the platform (e.g. group coordination and sharing activities, awareness, citizens participation, etc.), the particular targets involved (e.g. families) and the choice done at the development level (mobile vs desktop). When exploring the UX, the entire process of acquiring and integrating a product, including aspects of design, usability, usefulness and functionality are addressed.

In Families_Share, the UX evaluation will take into account these factors: usability, usefulness, aesthetics and value of the Families_Share system. Beside, how technology usage evolves over time will also be considered, since "adoption and use must be seen as parts of the same process, and in fact the use can be seen as the continual re-adoption of technology and adaptation of technical systems to working practice" (Dourish, 1999).
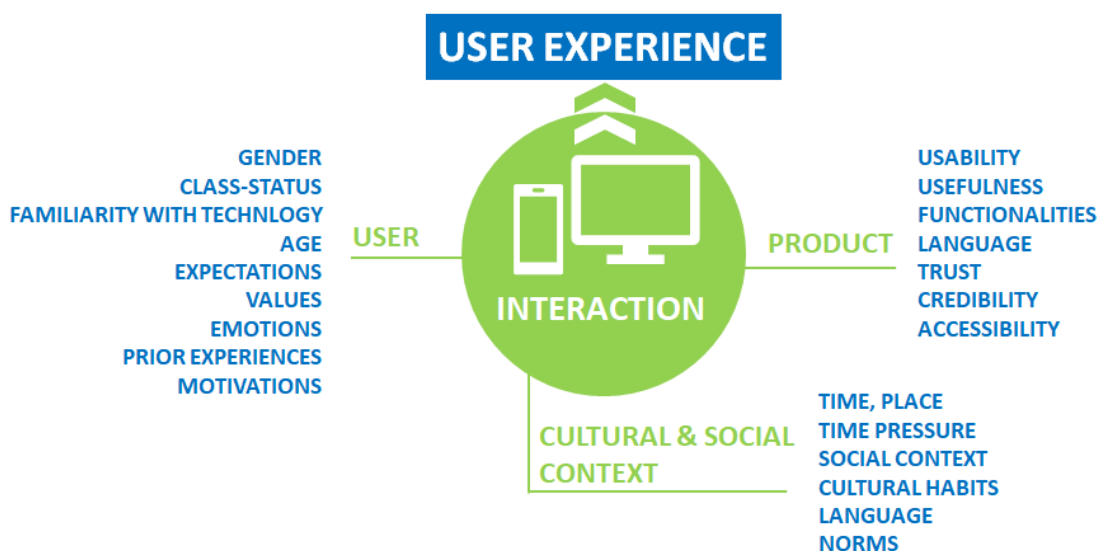
Figure 2. User Experience forms and develops over time and is influenced by the characteristics of the i) user, ii) the characteristics of the product and iii) the characteristics of the context in which the user interact with a product

The evaluation framework will consider the two parts of the Families_Share service, namely the web-based portal and the mobile application. The type of product will affect the methods and goals of evaluation. For example, user experience studies of web sites (Garrett, 2010) emphasize visual issues whereas research of hand-held devices needs more attention on issues such as size, weight and mobility. In addition, the target use group needs to be defined before testing prototypes; for instance, if the device will target users are not very familiar with computers.

We report the different dimensions that will be explored for evaluating the UX of the Families_Share platform.

Usability

"Usability" refers to the ease of access and/or use of a product or website. The official ISO 9241-11 definition of usability is: "the extent to which a product can be used by specified users to achieve specific goals with effectiveness, efficiency and satisfaction in a specified context of use." A usable interface has three main outcomes:

- *Effectiveness*, is the accuracy and completeness with which users achieve certain goals. Indicators of effectiveness include quality of solution and error rates.
- *Efficiency*, which is the relation between (1) the accuracy and completeness with which users achieve certain goals and (2) the resources expended in achieving them. Indicators of efficiency include task completion time and learning time.
- *Satisfaction*, which is the users' comfort with and positive attitudes towards the use of the system. Users' satisfaction can be measured by attitude rating scales.

Usefulness and acceptability

Technology Acceptance Model - developed by Davis (1989) - is one of the most popular research models to predict use and acceptance of information systems and technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably: i) perceived usefulness and ii) perceived ease of use.

- perceived *usefulness* (PU) is the user's subjective probability that using a specific application system will enhance his or her job or life performance.
- Perceived *ease of use* (EOU) can be defined as the degree to which the prospective user expects the system to be free of effort.

Moreover, according to extensions of TAM model (Venkatesh & Davis, 2000; Kim, Chun & Song, 2009), *attitude* and *intention* to use are jointly influenced by perceived ease of use and perceived usefulness. In this perspective, attitude as conceptualized by social psychology theory (Ajzen and Fishbein, 1977; Ajzen, 1991) have a mediating role not only on the behavioural intentions but also on the acceptance and on the continuous use of technology.

Thus, it will allow conclusions by analyzing the main determinants of technology acceptance (Davies, 1985, 1989) – the perceived usefulness (=value in UX measurement), and ease of use (=usability in UX measurement) and this will feed into the platform re-design and adjustment taking place in WP2 (M23).

Trust and credibility

Families_Share platform will store and manage users personal data and one of the main concerns users have online is online privacy and security. Trust is indeed a key aspect that strongly impact on user acceptance of a system. In the evaluation of the Families_Share platform attention will be paid to how users perceive the

approach of managing personal data. These aspects will be explored in the interviews, the focus groups and in the survey by tackling aspects related to users perceptions about privacy issues and online security. Since in Families_Share platform, sensitive information about children are shared, particular attention will be paid on how parents feel when sharing these information and if privacy settings implemented in the interface (according to the Data Management Plan and the Ethics Requirements) meet parents' needs.

Key aspects that will be considered in relation to privacy and security are taken from previous studies in the field (Cavoukian, 2012). The evaluation will investigate user *awareness* on privacy issues, in particular if users are aware of the type of private information that are required and the motivation behind the collection of specific data. In parallel, the evaluation will also explore if users can access essential information related to their data and eventually modify their privacy setting. Evaluations will focus on how information are perceived (for instance if privacy policies are easy to understand) and on which actions can promote trust and privacy (enabling users to make privacy choices). These aspects related to trust, credibility and privacy will support activities in Task 6.3 (Trust and safety framework) and inform the development of the framework.

The temporal dimensions of the User Experience: appropriation and adoption

Evaluation studies often focus only on the initial phase of the user adoption process. Nevertheless, the way interactive products are experienced and evaluated change and develops over time [Karapanos, 2009]. The consideration of the temporal dimension of the user experience entails a focus on how users integrate technology into their daily life and on the processes through which products emerges as useful – or not - in a process of appropriation in certain contexts of use. Karapanos and colleagues (2009) proposed a framework that describes how the quality of user experience develops over time. They discuss the difference between initial and prolonged experiences and the product qualities that motivate prolonged use. They argue that product qualities that make initial experiences satisfying (usability, easy-of-use) do not necessarily motivate prolonged use, which seems instead to be motivated by the ability of the product to address the need of expressing one's self. They conceptualize the temporality of experience as characterized by 4 phases: *anticipation* – in which the user forms expectations; *orientation* – that refers to initial experiences; *incorporation* – when the product becomes meaningful for users; and finally *identification* – when people form a personal relationship with the product (Karapanos, 2009).

This perspective on the temporal dimension of the User Experience, is in line with the longitudinal field-study addressed in Families_Share that aims at understanding how the platform is experienced over time and how it is appropriated by local communities. Appropriation is defined as the co-adaptation of technologies and practices that characterize successful adoption experience with collaborative technologies. "Appropriation is what happens when a group 'makes a technology its own'. This often takes the form of unexpected or unanticipated uses of technology, although it can also mean the development of novel practices organized around the specific opportunities offered by a technology" (Dourish, 1999).

The concept of appropriation can help in including the temporal perspective into the evaluation process and it is in line with Families_Share objectives and iterative approach, where new requirements are derived by observing how technology is understood and appropriated by local communities over time. Furthermore, having a focus on long-term use allows us to consider mutual adjustment between the technical side and the social side.

2.2.   Target groups

The evaluation of the Families_Share application will engage different actors, that play different roles in the Families_Share platform, namely:

1. Community managers (CM)
2. Groups administrators (GA)
3. System Users (U)
4. Stakeholders engaged in the projects (e.g. ONG, HR departments, local authorities, schools etc.)

Each of these user groups should be engaged in the evaluation to investigate specific aspects related to their role. Beside, investigation methods should be adjusted to the specific goals of investigation, to the role they play in the project and according to the Families_Share goals in terms of inclusive involvement of a diverse group of users in terms of gender, class-status, migrant background etc. Families_Share actually aims at fostering non-discrimination of local and digital communities (e.g. low-income families, gender equality issues, supporting women after maternity leave, etc.). In synergy with activities performed at the community management level (see part B of this deliverable) and in synergy with raising awareness campaigns developed in WP5, evaluation activities will take care of the inclusive involvement of local communities as also defined in the RRI indicators (WP4).

# 3. Investigation methodology and tools for the 1st pilot

A mix of qualitative and quantitative data will be used, as well as a mix of online and offline approaches are foreseen. Each City Lab Pilot will make use of its own Families_Share Mobile Info Point (set up in T5.2) to ensure continuous information about the ongoing process, face to face support to current users as well as engagement and reach out of new ones.

The evaluation will be based on standard usability methods (i.e. questionnaires) and the Technology Acceptance Model (TAM) theory and entails different actions to be conducted throughout the first pilot.

3.1. Evaluation timeline for the 1st pilot

Families_Share foresees two pilots and two main iterations of the platform development. Evaluation methodologies therefore are aligned with the i) different goals of the two pilots, ii) the technology maturity level at the two stages, iii) the number of people involved in the two different pilots.

The first pilot will run from January 2019 (M13) to August 2019 (M20). It is foreseen to engage minimum 20 users in each CityLab (total 100). The overall general timeline will be adapted and contextualized by each CityLabs in order to meet local specificities, according to the requirements of the specific community addressed (see D1.1, Part 4 "Needs analysis and co-design of Families_Share services").
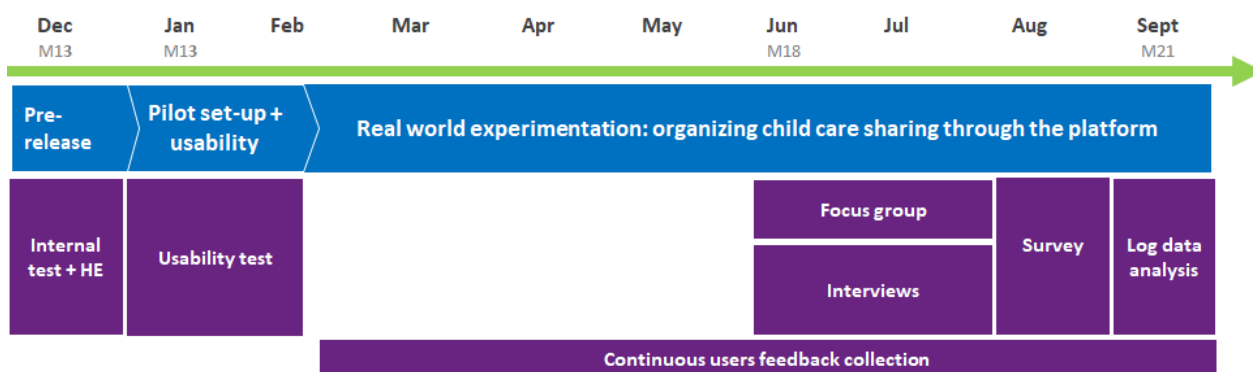
Figure 3. Indicative timeline to be used by each CityLab to orchestrate their interventions and define their specific timeline

The methodology for the second pilot will be integrated in the D3.1. at month 24, according to the input and lesson learned gathered in the first pilot.

As shown in Figure 3, investigation methods are different at the different stages of the pilot testing:
- Pilot set-up and early usability testing
  - At this stage we will perform Expert Heuristic Evaluation and a set of usability tests with participants that do not require the real usage of the platform
- Real world experimentation
  - In this phase, participants are involved in organizing childcare through the Families_Share platform. The whole User Experience will be evaluated through qualitative methods (interviews and focus groups) and quantitative approaches (survey and logging analysis).

Summary of the evaluations activities for the 1st pilot

Evaluation activity	Users engagement	Aspects / Dimensions investigated
Heuristic Evaluation	No external users involved - only internal 5-10 evaluators (usability experts and use-case scenario experts)	Visibility of system status Match between system and the real world User control Consistency and standards Error prevention Recognition rather than recall Flexibility and efficiency of use Aesthetic and minimalist design Help users recognize, diagnose, and recover from errors Help and documentation
Individual usability tests	4-5 participants	Efficiency • Measured as the level of ease or struggle to accomplish a task. • Measured as task completion time Effectiveness • Quality of solution • Error/criticalities experienced Perceived user difficulty • self-assessed ease of use (SEQ)
Interviews	5 participants	Usability Usefulness Trust and privacy Improvements for the 2nd release
Focus group	6-10 participants	Usability Usefulness Trust and privacy Improvements for the 2nd release

Survey	All participants that used the platform (> 20 participants for each CityLab)	Perceived usefulness of the system (PU) Perceived ease-of-use (PE) Attitude Toward Using (AT) Intention to Use (IN) Social diffusion (SD) Privacy (PR)
Log data analysis	Data collected from the platform (> 20 participants for each CityLab)	Diffusion Usage Continuity of usage Consistency Patterns of usage Socio-demographic characteristics of target groups
Continuous feedback collection	Open to all users	Criticalities (technical and usability issues) and "desiderata" collection through an online form

Table 2. Summary of evaluation activities to be performed during the 1st pilot

We explain the different methods and tools in the following paragraphs.

3.2.   Heuristic Evaluation

We will conduct an Heuristic Evaluation as first evaluation action of the Families_Share pre-release in order to identify main usability issues that should be fixed before the real-world experimentation.

Definition

Heuristic Evaluation (or Expert Evaluation) is a usability inspection method for finding the usability problems of an interface, that involves a small set of evaluators (5 to 10) that examine the interface and judge its compliance with recognized usability principles, the "heuristics" (Nielsen & Mohlic, 1990).

It provides some quick and relatively inexpensive feedbacks to designers at the very beginning of the evaluation, and to help teams in an early identification of criticalities in order to suggest the best corrective measures to designers in the early phases of a design process.

Evaluation aspects and indicators

A set of general usability heuristics (Table 2), that describes common properties of usable interfaces, is used during the process of the interface inspection. Each expert individually analyzes the interface and reports any usability issue, with a description of the problem and the priority level (see the template in in Annex 1 for an example of form that will be used to collect users feedbacks).

#	Heuristic	Description
1	Visibility of system status	Inform users about what is going on: feedback
2	Match between system and the real world	Use users' familiar language, use real-world conventions, logical organization of information

3	**User control**	Provide "emergency exit", support "UNDO", etc
4	**Consistency and standards**	Follow platform conventions
5	**Error prevention**	Eliminate error-prone conditions or provide confirmation option before users commit error-prone actions
6	**Recognition rather than recall**	Minimize the user's memory load: the user should not have to remember information
7	**Flexibility and efficiency of use**	Accelerators to tailor frequent actions (expert vs novice users)
8	**Aesthetic and minimalist design**	Only relevant information
9	**Help users recognize, diagnose, and recover from errors**	Error messages precisely indicate the problem, and suggest a solution (no code!)
10	**Help and documentation**	Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation

Table 3. Heuristics used during heuristic analysis to identify usability issues

Data collected during the expert inspection are shared among the team and an overall order of priority is defined. Results are further elaborated with the development team to find solutions to the criticalities identified.

Procedure and method

The heuristic evaluation will be performed by experts on usability or experts of the use-case scenario (i.e. Families_Share partners). Evaluators will be asked to examine the mobile app interface and to judge its compliance with the usability principles (the ten heuristics described above). The results of the evaluation will be recorded as written reports from each evaluator in a digital document as a google form (see Annex 1). The evaluator will fill out a report for each usability problem. She will describe the problem, indicate the violated heuristic, and give a score of severity between 1 (low severity) to 4 (high severity). At the end of all evaluation sessions, each collected usability problem will be analyzed and similar problems will be combined in order to reduce redundancy. The result will be a report with indications for the developers to fix critical usability issues and to improve the user experience of the Families_Share application.

3.3. Individual face-to-face usability testing

A set of usability tests that exploit scenarios and the think aloud approach will be conducted to evaluate usability issues and aspects related to privacy and security.

User engagement

For the first usability test 4 to 5 persons can be involved in each CityLab at the beginning of the 1st pilot phase

Definition

The usability test will tell you whether your audience can use what you've made. It helps identify problems people have with a specific interface and reveals difficult-to-complete tasks and confusing language (Nielsen 1993). Think aloud is used in usability test to understand users experience. In a thinking aloud usability test, you ask participants to use the system while continuously thinking aloud, that is verbalizing their thoughts as they perform tasks on the user interface (Nielsen 1993). Usability tests are cheap, robust, flexible, and easy to learn. They can allow teams in the early identification of usability issues before a real-world experimentation is conducted. The think aloud approach allow teams to discover how users experience a product. In particular, often usability tests let emerge misconceptions, which usually turn into actionable redesign recommendations: when users misinterpret design elements, the design team has the information to rapidly change the user interface.

How to conduct the tests

The tests are done individually and face-to-face, usually in laboratory settings. Two persons are required to manage a usability test:

1) A *moderator*: is the person interacting with the participants, that will explain the goal of the intervention, the scenario, propose the task and ask participants to explicit his/her thoughts related to the interface

2) A *note-taker*: is the person that carefully observe the usability tests and take notes during the session. Audio-recording can be used in order to check the notes after the session.

There are four major steps in the process of conducting a usability test.

- *Define usage scenarios and create tasks that address those goals*
    - Since the test is done before the real-world experimentation, scenarios should be created to help users in understanding the context of use of the interface and the motivations behind it
    - Specific tasks are created in order to explore all the relevant functionalities of a system.
- *Engage people*
    - Explain the goals of the action and engage participants. Parents that participated in the previous phases of Famileis_Share project should be engaged, in order to i) show project outcomes to participants, ii) collect insights that can be more valuable for the Families_Share project.
- *Conduct the test* (See Template to collect users feedbacks in Annex 2)
    - Explain the goal of the study and how it will be conducted
    - Collect participants consent to participate
    - Explain the Families_Share scenario
    - Ask participants to complete the single Tasks
    - Watch them try to perform the tasks and ask them to explicit their mental process during the completion of tasks. Think aloud method entails that participants are asked to think aloud as they are performing a set of specified tasks. Participants are asked to say whatever comes into their mind as they complete the task.

Evaluation aspects and indicators

Through usability test a number of aspects are evaluated, we report them in the following Table.

Aspects	Indicators	Description
Efficiency	Measured as the level of ease or struggle to accomplish a task.	Measured by observer through a 5-point Likert scale 1 = Completed without struggles 5= Not completed, lot of struggles
	Measured as task completion time	Measure time to complete each task
Effectiveness	Quality of solution	How did the task has been performed? Describe the interaction path the user followed to complete the task
	Error/criticalities experienced	Describe main issues encountered in terms of: i) understability of information/navigation flow/ UI elements, ii) trust & privacy issues, ...
Perceived difficulty	Perceived user difficulty (SEQ)	Overall, how easy did you find this task? 7 point Likert scale 1= very easy 7= very difficult

Table 4. Usability evaluation aspects investigated in the usability tests.

Common scenarios, tasks and templates to collect data will be shared among CityLabs in order to collect comparable results (See Annex 2)

3.4.   Semi-structured interviews

User experience analysis will be conducted through qualitative and quantitative self-reported data that will be collected through individual face to face interviews and focus groups.

All the participants of the first pilot need to be involved either through an interview or a focus group.

Definition

A semi-structured interview is a method of research used to explore a specific set of dimensions. It is organized as an open conversation to allow new ideas to be brought up as a result of the conversation dynamics. A semi-structured interviews guide the interviewed person without imposing strict questions. This freedom allows the interviewers to tailor the questions to specific interview context and to the specific individual they are interviewing.

Still, the interviewer in a semi-structured interview generally has a framework of themes to be explored. It is helpful for interviewers to have a topic guide pre-prepared which dimensions, topics and questions that the interviewer can ask in different ways for different participants.

Open-ended questions (e.g. "Tell me about…") are usually effective prompt and a good strategies is to reiterate upon those prompt that spontaneously emerge during the interview and can be recognized as belonging to the topical trajectories of the conversation ("You have just said that … can you tell me more?").

Dimensions should not be addressed in a given fixed order, rather they can be asked according to the ongoing conversation and according to the type of discussion (formal vs informal, individual vs group discussion).

User engagement

Individual interviews will be conducted after the local communities experienced the Families_Share service for a period of time (at least some weeks of usage). About 5 interviews in each City Lab will be performed after an initial period of test.

It is suggested to audio record interviews and focus groups.

Evaluation aspects and indicators

The whole User Experience is considered, including aspects related to usability, usefulness, acceptability and trust which will be investigated, as described in the Table below.

Aspects	Description and questions for single interviews
Usability	**Issues encountered in terms of usability** In general, how do evaluate your experience in the use of the platform/application? (positive or negative?) In general, would you define the platform/application easy/intuitive to use? Please give a rate from 1 to 7 (1 not easy at all, 7 extremely easy) Did you use both the web platform and the mobile application? If yes, did you encounter any differences in the use of them? Did you encounter any issue in the use of the platform/application? If yes, in which functionality did you face criticalities? ➜ Account creation ➜ Group creation ➜ Parent invitation ➜ Activity creation ➜ Calendar functioning ➜ other Did you have a group administrator role? If yes, did you encounter any issues because of this role?
	Strategies to cope with criticalities In case you encountered any criticalities in the use of the platform/application, how did you cope with them? Did you report them to the community manager? Did you use alternative tools (calendar? Whatsapp?)
Usefulness	**How the platform supported parents in : i) creating connections with other parents, ii) socializing childcare, iii) coordinating activities with other parents, iv) manage childcare activities** In general, did you find the platform/application useful? Give a rate between 1 to 7 (1 not useful at all, extremely useful) For the organization of which activities did you use the platform/application? (routine activities/summer- winter holidays, etc.) Did the platform/application help you to create new connections for co-organizing childcare with other parents? How many parents you got connected with through the platform/application during the first pilot? How many groups/activities you were involved into? Did the platform/application help you to get in contact with "new" parents? Was the co-organization of childcare activities with other parents through the platform successful?

	In general, do you think the co-organization of childcare activities with other parents through the platform helped you to save time and efforts or was the use of the platform/application time/efforts consuming? In %, how much the organization of the childcare activities did happen through the platform/application and how much outside it (through other applications/by phone/offline)? Did any conflicts arise through the setting up of the childcare activities? How were they solved?
	Improvements for enhancing the Families_Share platform Do you think the platform can be improved? If yes, which functionalities would you improve? Do you have any suggestions on how to improve them?
Trust and privacy	**Awareness of privacy aspects related to sharing data within groups** How do you feel about your personal data and data of your child/children shared with the other parents of groups you joined? Would you share more/less data? Which data? Do you know how to access your data and the data of your children and how to modify them?
	Understanding of privacy setting functioning Are you aware of the reason why the platform/application collects your personal data and the ones of your children? Is it clear who can access your data and the data of your child/children?
	Needs related to trust and safety in online environment How did you feel organizing childcare activities online instead of face to face in terms of trust? Did you trust the other parents involved? • If not, why? • If yes, did you already know the parents of your group? Did any conflicts about trust arise during the pilot?
Improvements for the 2nd release	**Additional functionalities users would like to have related to: i) communication, ii) communication, iii) coordination, iv) activities management, v) information, vi) trust and privacy, vii) self-reflection tools (Open Data Analytics)** Would you add or improve any functionalities in the platform/application? If yes, which ones? Would you add another value -sharing/banking system? In particular, which aspect can be better improved? Communication, coordination, activities' management, information, trust and privacy, self-reflection tools.
	Additional functionalities specific for Community managers and Group Administrators For group administrators: are there any functionalities you would like to add?

Table 5. Topics investigated during the individual interviews.

In order to collect comparable data across City Labs, a common Template has been created to collect and share data. See Annex 3.

3.5. Focus group

A focus group will be conducted after the local communities experienced Families_Share service for a period of time (at least some weeks of usage).

User engagement

6 to 10 users will be involved in the focus group. It is suggested to audio record the focus groups.

Definition

Focus groups are a type of qualitative research used to acquire feed-backs and insights toward products, ideas and projects. Morgan (1998) defines focus groups as group interviews where a moderator guides the discussion while a small interactive group discusses with the interviewer but also with other group member the topics introduced by the moderator. Typically, focus groups are composed by six to ten participants having similar backgrounds but displaying also differences between participants that are useful in enhancing discussion and opinions comparison and evaluation. The main advantage of using focus group techniques rather than other methods (individual interviews, for instance) is that the focus groups recreate a situation similar to the ordinary social process of opinion-making. This allows participants to freely express their opinion in a well-known modality, that is, the peer-to-peer discussion. The group process may generate more information than a comparable number of depth interview and since no one is required to respond to a questions, spontaneous responses are encouraged when people have a definite point of view and respondent's views are facilitate by the group process.

Nevertheless, there are potential drawbacks. Some people may feel inhibited in a group situation and pressures can also cause over-claiming or social loafing. Similarly, the bandwagon is a well-known effect by which people tend to conform to the norms of the group.

Organization and procedure for the focus groups

Focus group can be more or less structured according with the target and with the research questions. In our case we chose a middle-way strategy. Given the exploratory nature of the focus groups, the moderator follows a schedule and pay attention to discuss each of the dimensions relevant for the inquiry but also takes advantage of eventual emerging issues and discussions among participants.

The main steps necessary to organize focus groups are reported below.

- Participant recruitment
- Location choice
- Setting predisposition (tape recorder placement, refreshment predisposition, etc)
- Moderator's presentation of the focus groups' goals and of the procedures to be followed during the interview
- Warm-up of the participants (2-3 minutes for each participant)
- Moderator's introduction of the topics
- Free discussion
- Moderator's summary of the discussion and re-launching of the more challenging questions
- Moderator's conclusions and thanks.

Evaluation aspects and indicators

Similarly to the individual interviews, the whole User Experience is considered, hence aspects related to usability, usefulness, acceptability and trust. Key aspects that will be investigated are described in the following Table.

Aspects	Description and questions for focus groups

Usability	**Issues encountered in terms of usability.**
	In general, how do evaluate your experience in the use of the platform/application? (positive or negative?)
	In general, would you define the platform/application easy/intuitive to use? Please give a rate from 1 to 7 (1 not easy at all, 7 extremely easy)
	Did you use both the web platform and the mobile application? If yes, did you encounter any differences in the use of them?
	Did you encounter any issue in the use of the platform/application? If yes, in which functionality did you encounter criticalities?
	   ➜ Account creation
	   ➜ Group creation
	   ➜ Parent invitation
	   ➜ Activity creation
	   ➜ Calendar functioning
	   ➜ other
	How did you perceive the role of the group administrator? Do you think the role of group administrator is clear and well settled in the platform?
	Did you rely on the group administrator for any issue?
	For the group administrators: did you encounter any issue because of this role?

	Strategies to cope with criticalities In case you encountered any criticalities in the use of the platform/application, how did you cope with them? Did you report them to the community manager?
Usefulness	**How the platform supported parents in : i) creating connections with other parents, ii) socializing childcare, iii) coordinating activities with other parents, iv) manage childcare activities** In general, did you find the platform/application useful? Give a rate between 1 to 7 (1 not useful at all, extremely useful) For the organization of which activities in your group did you use the platform/application? (routine activities/summer holidays, etc.) Did the platform/application help you to create new connections for co-organizing childcare with other parents? How many of you already knew each other and how many got connected because of the platform/application during the first pilot? How many activities you were involved into? Was the co-organization of the childcare activities with other parents through the platform successful? In general, do you think the co-organization of childcare activities with other parents through the platform helped you to save time and efforts or was the use of the platform/application time/efforts consuming? In %, how much the organization of the childcare activities did happen through the platform/application and how much outside it (through other applications/by phone/offline)? Did any conflicts arise through the setting up of the childcare activities? How were they solved?
	Improvements for enhancing Families_Share platform Do you think the platform can be improved? If yes, which functionalities would you improve? Do you have any suggestions on how to improve them?

Trust and privacy	**Awareness of privacy aspects related to sharing data within groups** How do you feel about your personal data and data of your child/children shared with the other parents of groups? Would you share more/less data? Which data? Do you know how to access your data and the data of your children and how to modify them?
	Understanding of privacy setting functioning Are you aware of the reason why the platform/application collects your personal data and the ones of your children? Is it clear who can access your data and the data of your child/children?
	Needs related to trust and safety in online environment How did you feel organizing childcare activities online instead of face to face in terms of trust? Did you trust the other parents involved? If no why? If yes, did you already know the parents of your group? Did any conflicts about trust arise during the pilot?
Improvements for the 2nd release	**Additional functionalities users would like to have related to: i) communication, ii) communication, iii) coordination, iv) activities management, v) information, vi) trust and privacy, vii) self-reflection tools (Open Data Analytics)** Would you add or improve any functionalities in the platform/application? If yes, which ones? Would you add another value -sharing/banking system? In particular, which aspect can be better improved? Communication, coordination, activities' management, information, trust and privacy, self-reflection tools.
	Additional functionalities that Community managers and Group Administrators would like to have For group administrators: are there any functionalities you would like to add?

Table 5. Topics investigated during the focus groups.

In order to collect comparable data across City Labs, a common Template has been created to collect and share data (see Annex 4).

3.6.   Survey

By M21 quantitative data will be collected through a short survey in order to gather data from end-users that comparable in different phases of the piloting. These more structured data can be used to evaluate how usefulness, ease-of-use, user satisfaction and user performance evolve from the first to the second pilot (KPI #12).

The theoretical framework for the survey draws primarily on the Technology Acceptance Model (TAM) (Davies, 1985, 1989) and its further extensions (Venkatesh & Davis, 2000; Kim, Chun & Song, 2009), exploring acceptability and social factors. By acceptability we refer to the general disposition of people towards the Families_Share application. As such, we expect acceptability to consist of (and/or depend upon) both usability issues (usefulness and ease of use) and cognitive factors (attitudes and intention). The survey will include two scales [*Perceived usefulness of the system* (PU) and *Perceived ease-of-use* (PE)] for exploring perceived usefulness and perceived ease of use of the application that are two main components in the

Technology Acceptance Model (TAM). According to the model, attitude towards using technology and intention to use are jointly influenced by perceived ease of use and perceived usefulness. Two scales will investigate this two cognitive factors [*Attitude Toward Using* (AT) and *Intention to Use* (IN)]. The theoretical background for these two dimensions is provided by the Theory of Planned Behavior proposed by Ajzen and Fishbein (Ajzen & Fishbein, 1977; Ajzen, 1990). The theory assumes that people consider and reason on the consequences of their behavior before performing it. Behavioral intentions develop from the personal individual's attitude toward the behavior and the individual's impression of the way other people perceive that same behavior. Therefore, personal attitude and social evaluation influence behavior intention, which is essential to the performance of a behavior and, consequently, to behavioral change. These two dimensions (attitude and intention) are included in the TAM so that a user's perceptions concerning usefulness and ease of use of a technology are hypothesized to be salient beliefs that determine attitude toward the use of the technology and eventually lead to the acceptance and use (Kim, Chun & Song, 2009).

Moreover, the survey will explore other dimensions relevant to the project, such as social diffusion and privacy concerns and perception of the application. Social diffusion refers to the spread of an innovation from its originating sources among a group of potential users (Rogers, 2003). This process is mainly supported by word-of-mouth communication between members of the community and close contacts. Four questions will be included in the questionnaire to explore such dimension [*Social diffusion* (SD)]. Lastly, privacy concerns and users' personal perception of the security of the application will be investigated with a dedicated scale [*Privacy* (PR)]. These aspects will inform the activities in Task 6.3 "Trust and safety framework", specifically taking the first steps toward the investigation of potential differences in cross-national privacy perceptions and related concerns.

User engagement

All the participants engaged in the 1st phase will participate to the short survey, that will be distributed either through the app or distributed through e-mail or in a paper-based format.

Evaluation aspects and indicators

Aspects	Description	References
Perceived usefulness of the system (PU)	The degree to which a person believes that using the system would enhance his or her task	*TAM (Technology Acceptance Model)* Davis, 1989
Perceived ease-of-use (PE)	The degree to which a person believes that using the system would be free from effort	*TAM (Technology Acceptance Model)* Davis, 1989
Attitude Toward Using (AT)	User's assessment of the desirability of using the system	*TAM (Technology Acceptance Model)* Ajzen and Fishbein, 1977; Ajzen, 1991
Intention to Use (IN)	The continual intention to use the system	*TAM (Technology Acceptance Model)* Ajzen and Fishbein, 1977; Ajzen, 1991

Social diffusion (SD)	Social diffusion refers to how the system spread through communication among members in the community.	Rogers, 2003
Privacy (PR)	Beliefs about the potential consequences related to users selves-disclosure on certain information, especially their personal information, in the system	Hogben and Naumann, 2009

Table 6. Scales used in the survey

Material can be found in Annex 5.

3.7.   Logging analysis

Interviews and focus groups will be coupled and complemented by logging analysis to evaluate the usability and the interaction patterns.

Definition

A log file is a file that records either events that occur in an operating system or messages between different users of a software. The use of data stored in transaction logs of the Families_Share database can provide valuable insights into understanding how user interact with the interface, shedding light on most used functionalities, issues with specific functions, content sharing, evolution of usage over time. Logging analysis is particularly important also to monitor KPI and the overall adoption process of the Families_Share platform across the two pilots.

Evaluation aspects and indicators

Evaluation aspects and information that will be collected are reported in the following Table.

Aspects	Description
Diffusion	# of users that accessed the CityLab websites
	# of users that downloaded the app
Usage	# of profiles created
	# of groups created
	# of activities created
	# messages exchanged
	# users involved in activities
Continuity of usage	Variation in previous indicators over time (Did users continued to used the app?)
Consistency	# errors

	# app crashes
Patterns of usage	# (and type) of app access (direct, from notification, from email, etc.)
	Duration of app interaction
	# of features used (i.e. features displayed on the screens)
	Most frequently used features / top screens
Socio-demographic characteristics	Gender Age Number of children Migration background

Table 7. Summary of the data collected through the log analysis

3.8. Continuous feedback collection

In order to support an iterative development process, we will provide tools for collecting feedback from the users in a easy and organized manner. Continuous feedback will include information on technical issues (for example, crashes or bugs), usability issues (e.g. inadequate supporting information, inconsistencies in the interface, translation errors or typos) and feature requests (e.g. desiderata or suggestions). Data will be collected through an online form (see a Template in Annex 6). The continuous feedback gathered with this tool will be use to make decisions during a more formal review process together with the technical partners.

4. Data collection management

From the technical point of view, data concerning the platform will be collected by VILABS, whereas other data will be collected by SmartVenice as WP3 Leader. FBK and SV will create ad hoc templates for the different studies to be carried out. The sharing infrastructure for data management will be created in accordance with the privacy regulation described in D7.3.

The technical tools and sharing infrastructures to be used will be defined and created as part of WP3 activities, in coordination with WP4 impact assessment activities.

Part II. Guidelines for Community Managers

The following pages presents the handbook that describes the lessons learnt extracted by the project´s partners in COKIDO (De Stuyverij) and NEXTHAMBURG (urbanista) in order to provide inspiring insights, hints and pitfalls to the Families_Share CityLabs.

CONTENT

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                Marie-Christin Schulze
                and Jana Gregorczyk

INTRODUCTION

This handbook is part of the deliverable 3.1 in Families_Share: „Guidelines for Community Management". Lessons learnt by the project´s partners in COKIDO (De Stuyverij) and NEXTHAMBURG (urbanista) are extracted and described providing inspiring insight into experiences, hints and pitfalls in community management pilot projects in Belgium and Germany. In conclusion, a spectrum of ideas and possibilities for community management in the Families_Share CityLabs can be drawn. The material provided within this handbook shall be distributed to the Families_Share community managers. Further, tutorials and webinars will invite community manager and CityLab partners to exchange on the experiences made in managing their CityLabs' community.

urbanista

LESSONS LEARNT
OFFLINE COMMUNITY MANAGEMENT
by De Stuyverij in COKIDO

EXPERIENCES MADE IN COKIDO LEAD TO SEVERAL HINTS AND PITFALLS TO TAKE INTO ACCOUNT AND TO REFLECT ON WHEN MANAGING A COMMUNITY.

EXCURSUS Cokido has a special status in our best practice since it is the basis of which the Families_Share platform is designed and it is the approach taken in the Kortrijk CityLab. It is a solidary out-of-school care co-organized by the parents, grandparents & family members.
The mission of De Stuyverij and Cokido is to find more balance between their work and life and to revive people's desire to live and work together. Through co-creation, co-working and co-entrepreneurship. De Stuyverij inspires, connects and empowers young and old, local governments and social networks across projects, so that overall cohesion can emerge.
Cokido offers a bottom-up solution for parents who share childcare services. It supports parents in co- organizing care during vacation periods through a turn roll model (1 to 5 days) using public spaces to host children. Cokido started from an offline grassroots basis and was built on self-organization of parents and other persons, such as grandparents, family and friends. Alltogether they organize off-school childcare and make arrangements to alternately take care of the children during holidays and/or after school.
Cokido is facilitating approximately 25 groups in 13 cities and towns (Ghent, Antwerp, Kortrijk, small villages). Overall more than 750 families are involved:
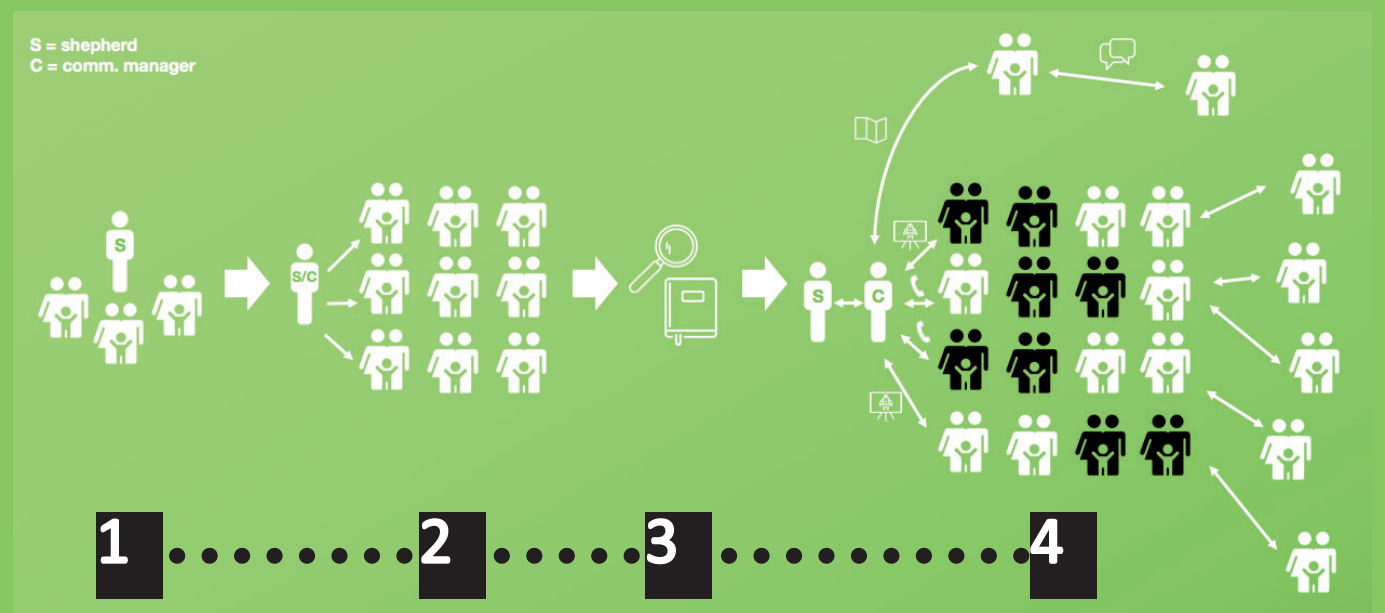**www.destuyverij.be**

Lessons learnt in community management in COKIDO have been shared and discussed in a workshop organzied by De Stuyverij in Kortrijk, September 4th 2018.
The report and presentation by De Stuyverji in the framework of the workshop has been summerized: In the following, experiences on the phases of engagement within the community, hints and pitfalls as well as roles and responsibilites in community management are shared.

phases of the first co-playing communities to enable organic growth

S = shepherd
C = comm. manager

1 . . . . 2 . . . . . 3 4

1. pilot
Start co-playing with a group of parents (about 10 families) for a few days (pilot testing phase). Repeat this over a longer period: in the next holiday with the first test group (that maybe has some extra parents) and in addition start a second group somewhere else. Next vacation start a third group and keep co-playing with the first two groups as well. Piloting takes three vacations periods minimum with 3 different groups preferably spread across the country or city.
Detect different insights from all groups. Experiment with different ways of planning, communication, detect were extra support is necessary,... Clear open questions and document everything: What about insurance? Are there any legal issues? Find enablers and partners such as organisations, city council and schools.

2. develop
First analyze your pilot tests. Focus on the insights gathered to be taken into account during the developing phase. Secondly, break it down step by step. Thirdly, create a simple manual and support material.

3. share
Ones the platform is created, developed and launched, new ideas and inspiration get shared through our platform. Reward your pioneers, create heroes and sheroes and organize info meetings for new startups. Share all documents and best practices.

4. grow
This phase is about scaling to lots of different groups with all the knowledge within the platform. The growing phase has it's focus on scaling. The new piloting is about new implementations of the platform (for example implementing it in companies or trying out the platform in combination with children with disabilities,...) You are building a strong community pattern because its not the early adopters anymore but a mainstream movement. More and more groups join, and the focus of the community manager is too keep connecting the people.

LESSONS LEARNT

OFFLINE INITIAL COMMUNITY MANAGEMENT, PERSONAS OF COMMUNITY ENVIRONMENT by De Stuyverij in COKIDO

THE ROLES PRESENTED ALL RELATED TO THE COMMUNITY AND DEVELOP IN DIFFERENT STAGES OF THE COMMUNITY'S GROWTH.

the sheperd

- The shepherd connects with early adapters in order to start first plannings for the piloting
- The shepherd's focus is not yet a larger community of different groups but the small community around 1 or 2 groups
- He/She detects how groups interact and co-play to analyze their needs

the early adopter

- Strong families which adopt to the project easily, especially in the beginning of a group, mostly because of experiences and believe in informal exchange systems
- Critical supporters and nay sayers (within a mainstream even) can become adopters after perceiving periods of success
- early adapter might strike for new experiences and leave the group

the tourist

- A parent that joins co-playing with his/her children to gather experiences without playing an active role yet (e.g. in taking turns)
- Helps and co-plays until the tourist feels engaged enough to take a turn in a group
- Volunerable families could join in this way

the core group

- It's not always the initiators, it can also change when a group grows
- Mainly it's the people willing to invest in the actual planning of the vacations
- Parents who want to do more than just co-play but have an active role in the day to day organisation of these co playing events

the community manager

- Ones the shepherd is starting to share the knowledge and helps new groups start up with the tools created, he becomes a community manger.
- To help start these groups: Organise an info meeting for parents who want to start a group.
- Shepherds support the person who wants to start a group and help them to explain it to their peers. At that point the shepard becomes a community manager.
- The threshold for starting is smaller if parents feel there is support, that they don't have to start from scratch and invent everything themselves.

the story teller

- An experienced co-player who exchanges experiences and success stories in other communities
- Distributes the philosophy and gains potential sheperds
- Acts as an ambassador of the project

The DNA of the core group

WITHIN THE COKIDO GROUPS (CORE GROUP), SEVERAL ROLES AND RESPONSIBILITIES HAVE BEEN ESTABLISHED TO ENCOURAGE PARTICIPATION AND GROWTH.

> Try to change tasks between rolepartners with every new period.

> - Light work
> - The knowledge stays in a group
> - Easy in / out of group

> When the group grows, it is advised to share one role between two families. Thus, there is a back up and knowledge stays in the group when there are holidays or when a family leaves a group.

1 planning

- Controls the agenda
- Communicates about the agenda

2 legal contacts

- Contact with school / location owner
- Contact with local government
- Connects group & partners

3 toys & building

- Decorates
- Asks group about toys etc.
- Makes agreements with group about:
- Hygiene
- Cleaning
- Key
- ...

4 communications

- Support group in attracting new members
- Welcomes new members
- Flyers
- Gives info & documents to new members

5 admin & finances

- Organizes meetings
- Reports meetings
- Shares documents
- Keeps track of finances

LESSONS LEARNT

OFFLINE COMMUNITY MANAGEMENT
by De Stuyverij in COKIDO

EXPERIENCES MADE IN COKIDO LEAD TO SEVERAL HINTS AND PITFALLS TO TAKE INTO ACCOUNT AND TO REFLECT ON WHEN MANAGING A COMMUNITY.

COMMUNITIES START best in existing networks:

- School
- Neighbourhood
- Work
- ...

STAY KIND AND UNDERSTANDING:

- Never become bossy, some people have time others don't, this is a 'snapshot' thing
- Family life is always busy, people come and go in active roles

hints

HEAVY IMPACT IN A WRONG WAY:

- Keep in mind, that this is a voluntary activity, not work.
- The first preparing period of starting a group is intense!
- Only the first time! Start a core group community.
- Express to the members that once they co-played for the first time it will be much easier to organize.
- Mind the growth of your core group and focus on it.

GROUPS WILL NOT REMAIN THE SAME:

- The group you start with is never a representation of your final goal group.
- Early adopters are most of the time early thinkers.
- The first groups will be strong people.
- Let strong people build bridges to more vulnerable people 'the tourist role'.

TRUST as currency:

- Once people trust each other they will be much more open to new members.
- Trust comes fast with kids involved.
- Cover safety issues with some basic rules and insurances.

SET UP A RELIABLE AGENDA how the group will grow:

- Leaving a planning period open for too long is a classic mistake.
- Start your agenda at least 5 months before the holiday and hold 2 meetings in the beginning and the last meeting one month before kick off.
- Adapt your organizational periods to the official subscription dates.

SUPPORTING

PUBLIC PLACES prefered over private ones

- For security reasons, it is recommended to co-play not in private homes but in public venues, which can be recommended by the community management.

No COMPETITION - The plattform is an ADDITION to existing solution:

- Shortage.
- Differentiation.
- Not everyone likes to be involved.
- Offering a free method doesn't mean everyone wants it for free, price is a rare reason why people get involved.

EVALUATE FOR CHANGES AND ADAPTIONS:

- Meet up with the core group.
- Create BBQ or closing moment.
- Include kids.
- Gather feedback from everyone.
- Post it exercise.

NETWORKING

ACTIVATING

CONTACT AND AVAILIBILITY

pitfalls

ONLINE COMMUNITY MANAGEMENT
by urbanista IN NEXTHAMBURG

LESSONS LEARNT IN NEXTHAMBURG HAVE BEEN SHARED IN THE DISSERTATION „THE VALUE OF A PARTICIPATORY LABORARTOY OF IDEAS"* BY JULIAN PETRIN, THE FOUNDING PARTNER OF URBANISTA.

The findings on community building, growth as well as key roles and responsibilties are briefly presented in the following pages.

EXCURSUS Nexthamburg is a prototype for a new approach to civic participation: a participative ideas laboratory that values the knowledge and creativity of the many for urban development: www. nexthamburg.de

With the help of the tools provided by Nexthamburg on the Internet and during on-site events, anyone can participate. Nexthamburg's long-term goal is to help citizens find their way to promising solutions and to broaden the scope for what is feasible in furture urban planning.

The online and offline collection of ideas is the "basic material" of Nexthamburg. On the basis of these ideas, the Nexthamburg activists formulate theses, that are intended to influence the public debate. In addition, data stories and campaigns are developed on the basis of community topics - also in order to integrate and reinforce citizens' topics.

Nexthamburg has been active since April 2009 and has been organised as a non-profit association since autumn 2012. Nexthamburg was funded as a pilot project of the National Urban Development Policy by the Federal Ministry of Transport, Building and Urban Affairs from 2009 to the beginning of 2012. Today, Nexthamburg is financed by private donations, from projects with foundations and other actors in the city and by passing on knowledge to other NGOs or municipalities.

*original title „Der Wert eines partizipativen Ideen Labors - Ein methodologischer Versuch am Beispiel des Realexperiments Nexthamburg" by Dr. Julian Petrin (2016) , HafenCity University Hamburg, online: **http://edoc.sub.uni-hamburg.de/hcu/volltexte/2016/292/**

community building

DIVERSITY IN COMMUNICATION CHANNELS ALLOWS A DIVERSE COMMUNITY

- A mix or series of diverse communication tools and channels provide a fair oportunity for participation: to reach out to a broad spectrum of people, several different approaches depending on the target groups needs are important.
- The broader the spectrum of channels, the broader the media resonace, the range of the project and the potential of the community´s growth.

WITHOUT MONITORING THERE IS NO VALUABLE EVALUTION AND LEARNING

- Monitoring is a sensitive topic on online platforms.
- Anynomity or a limited access to personal information when registering provides a sense of fluid and non-commitmed activity, which is necessary for an open think thank and crowd-sourcing-process.
- At the same time, because of the limited user data generated, user behavioral analysis is difficult to realize.

A COMMUNITY NEEDS VISIBILITY FOR IDENTIFICATION AND OWNERSHIP

- Visual perception of the community can stimulate identification with the project´s aims and the community itself.
- The community becomes a platform for exchanging and acknowledging self-owned and self-development ideas and needs.

EDITING COMMENTS AND DIALOGUES

CAMPAIGNING

## TRANSPARENCY IN MONITORING

ONLINE COMMUNITY MANAGEMENT
by urbanista in NEXTHAMBURG

roles & responsibilites

IN NEXTHAMBURG ROLES AND RESPONSIBILITIS OF THE COMMUNITY MANGEMENT ARE TAKEN BY A TEAM OF EXPERIENCED MODERATORS, PLANNERS, DESIGNERS, PROGRAMMERS, CURATORS AND MORE

THE COMMUNTIY

- Shares, exchanges and comments on thoughts and ideas, online and offline.
- Is a flexible body which allows fluidity.
- Is co-creatively involved in desicion making.
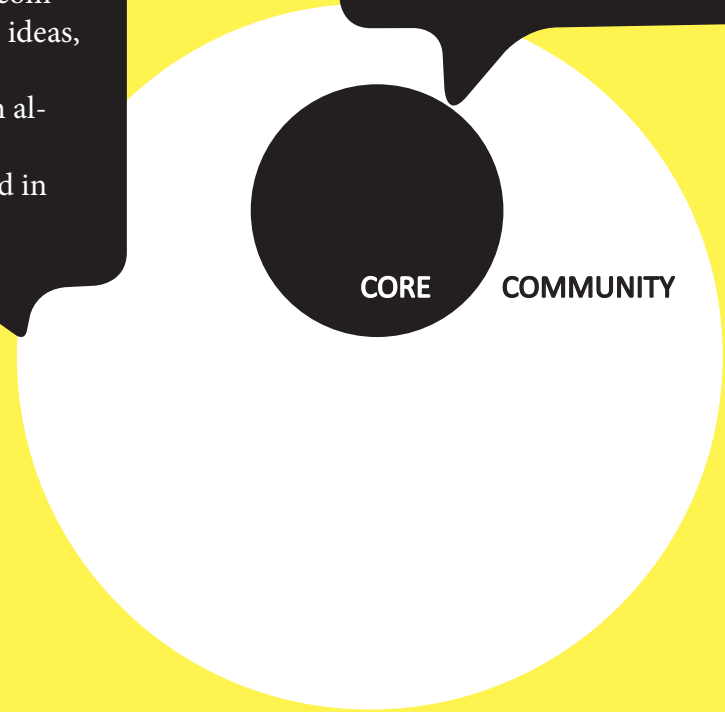
THE CORE COMMUNTIY

The core community describes a group of active members with continious particpation throughout the crowdsourcing process.

- Communicates and shares success stories and experiences.
- Establishes connections and forms networks.
- Builds bridges with potential new community members and the community in general.

CORE   COMMUNITY

THE COMMUNITY MANAGEMENT

The community management has been performed by a team of members with interdisciplinary expertise and skills sharing everyday life in their work atmosphere. Responsibilites are partly distributed between 1 - 2 persons depending on the lenghts of the project. 1- 5 persons of the community management which are recognizable in public events, allow the community to connect and to build trust.

- Designs the process.
- Involves stakeholders and actors.
- Sets up campaigning including social media presence.
- Executes and moderates events.
- Moderates and edits online discussions.
- Provides rules for communication transparently within the community online and offline.
- Evaluates citizens` contributions.
- Updates publically on results and next steps.
- Provides possibilities for feedback in diverse formats atractive for various groups.

THE EXPERT

- Provides inspiring input with special expertise on eye level, as an additional perspective on ideas developped and their feasibility.
- As external to the already established community, the expert provides neutrality and objectivity.
- Is active and present temporary - mostly in key moments of the process in public events.

ONLINE COMMUNITY MANAGEMENT
by urbanista in NEXTHAMBURG

community growth

A COMBINTATION OF ONLINE AND OFFLINE ACTIVTIES SUPPORTS THE GROWTH OF THE COMMUNITY, ITS CORE GROUP AND ONLINE ACTIVTIES. IN WORKSHOPS AND EVENTS PUCLIC AWARENESS IS ROSEN AND NEW CONNECTIONS ARE MADE.

THE COMMUNTIY GROWS IN COMBINATION OF ONLINE AND OFFLINE

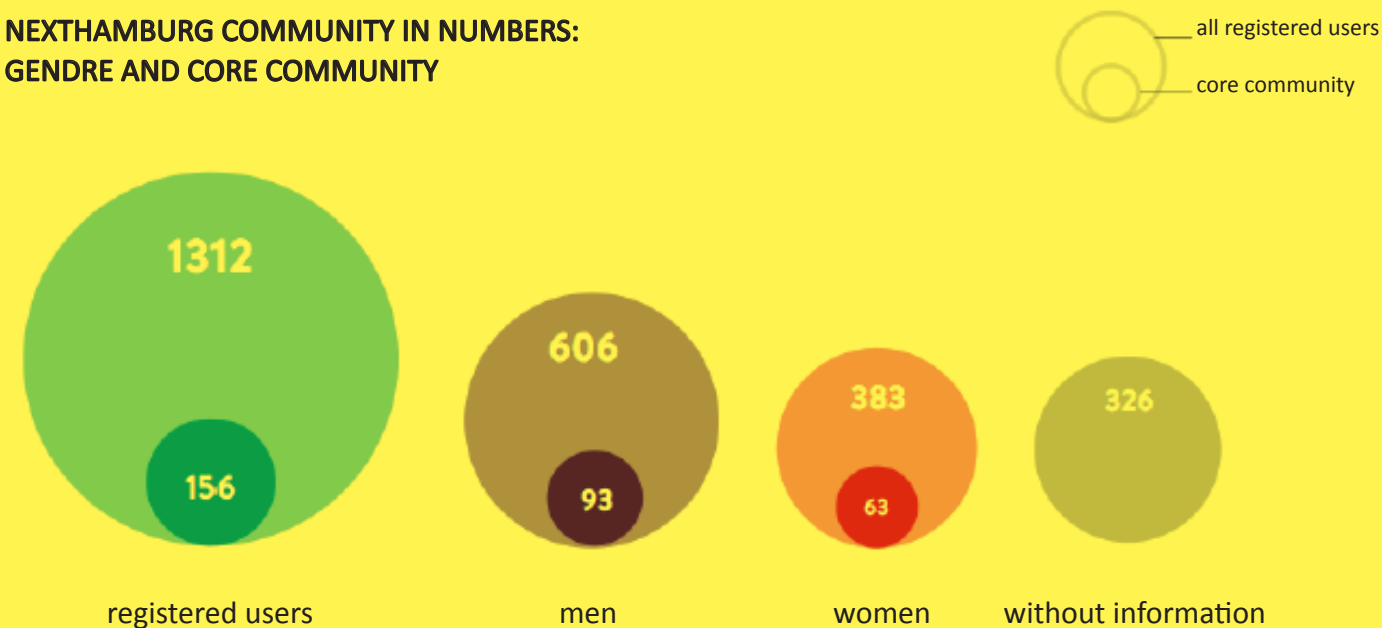Peaks of newly registered users appeared mainly after workshops and events have been taken place.
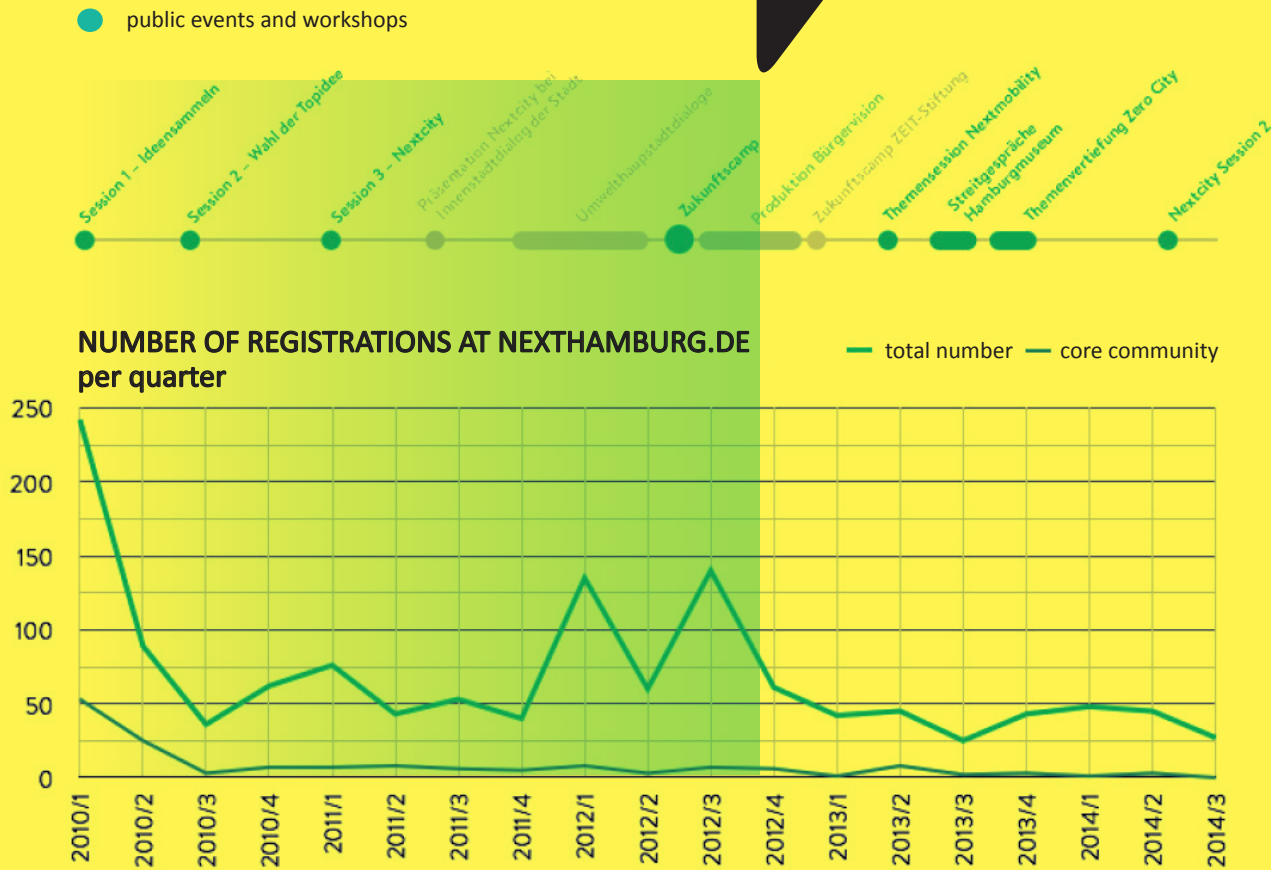
THE CORE COMMUNITY BUILDS BRIDGES FOR GROWTH

The core community is active online and offline and builds bridges between the general online and offline community because of there high rate and continious activity and communicative character.

KEEP IN MIND THE GENDER DIGITAL DEVIDE

In Nexthamburg´s community a higher percentage of generally male registered users of the online tool has shown. In relation to the totally registered users, there is a higher percentage of registered females in the core group, who are taking responsible roles in networking and community growth. It should be taken into account that gender of NEXTHAMBURG users has been drawn from the user´s registration name or email and not asked for directly.

● public events and workshops

NUMBER OF REGISTRATIONS AT NEXTHAMBURG.DE per quarter

— total number — core community

NEXTHAMBURG COMMUNITY IN NUMBERS: GENDRE AND CORE COMMUNITY

all registered users
core community

1312
156
registered users

606
93
men

383
63
women

326
without information

GUIDELINES FOR COMMUNITY MANAGEMENT in FAMILIES_SHARE

HERE A CROSS-SECTION AND COMBINATION OF LESSONS LEARNT IN COKIDO AS WELL AS IN NEXTHAMBURG ARE PRESENTED. THESE GUIDELINES FOR COMMUNITY MANAGEMENT IN FAMILIES_SHARE COULD PROVIDE IDEAS AND ORIENTATION FOR THE CITYLABS COMMUNITY MANAGEMENT.

1
manage the community as a fluid body

- Every community creates their own rules for communication, keeping in mind transparency.
- The community management can be described as a steering body, which allows fluidity of its membership and respects diverse personal situations of its members.

2
sharing roles & responsibilites

- Roles and responsibilites for managing the community should be exchanged and shared between various members of the community.
- Skills and passion or the motivation to learn and experience something new can be a guidance for distributing rules.

3
activating a core group

- A core community or group could provide a stable body within the community, being active in the community building process.

4
communicating diverse & transparently

- Using diverse community channels supports the activation of a diverse community.
- Transparently demostrating the community's rules, roles and structure as well the projects objectives, etc. gives opportunities for fair communication and flow of information.

5
building & growing community

- Is supported through the combination with offline activities, which encourage networking and exchange through public prensence and awareness.
- Identification and ownership with the project strengthens the community.
- Shared success stories and best practices by individual community members, through the management or the core group support the interest and growth of the community.
- Keep in mind every community´s path through various phases when building and growing.

6
exchanging information

- Sharing experiences with the CityLabs and the Families_Share team in order to evaluate the community management and growth as well as to provide opportunities to learn from each other.
- The information flow and exchange may include the participation in data collection and webinars or tutorials with the Families_Share partners (e.g. VILABS for technical issues).

GUIDELINES FOR COMMUNITY MANAGEMENT in FAMILIES_SHARE

managing conflicts 7

- Be a contact person for conflicts approaching between participants.
- Listen patiently and support with constructive solutions.
- Do not hesitate to ask for external advices on specific situations.
- Stay calm and try not to be emotionally too envolved in order to be able to give objective advices.
- Keep the information and conflicts confidentially as possible.

rewarding the engagement 9

- Rewarding the participation in your CityLab leads to more motivation and indentification for further engagement and growth of the community.
- There is no need for material rewards. Take participants' ideas and needs seriously. Further, opening space for exchange and networking in a thoughtful atmosphere shows care and respect for people´s involvement.
- Be creative and surprise your community with something to learn from and to take home!

approach a gendre mix 8

- Approach different gender to take roles in your community to encourage differsity in child care and resources.
- Especially try to contact and connect with male persons to participate in the informal child care. As one male participant will be part of a group, his participations will inspire other fathers to take part just like a snow ball effect.

external vs. internal management 10

EXTERNAL
- Input based on a professional background, expertise and know-how in child care, social innovation, etc. can be provided.
- Objectivity for evaluation and finding solutions when not involved in sharing cycle of a community.

INTERNAL
- Already established personal connections with community members encourage trust building and ease communication.
- Being familiar with the sharing system and the group dynamics encourage empathy for the community.

setting up a local info point 11

INFORM and DISTRIBUTE about Families_Share, your CityLab, ways for engagement and participation, current and upcoming steps continuously.

INVITE people to join your CityLabs activities via posters, leavelets, handouts, etc. distributed at the info point.

CONNECT with potential participants and connect people while hosting your CityLabs events at the info point. With continouty this space could become your CityLabs meeting point.

PROVIDE DEVICES for users or potential participants in your CityLab for registration and online exchange. Access to the online platform should be provided for people which might not be able to use a smart phone, comouter, etc. at home.
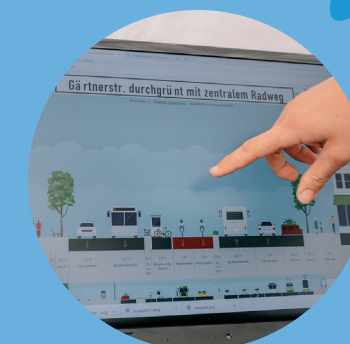
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ANNEX

Annex 1. Heuristic Evaluation

For conducting the Heuristic Evaluation a Google form (https://goo.gl/forms/815fQAVmDOAnqHQW2) will be used to collect experts feedbacks:

For each platform component each expert can report the type of heuristic that has been violated and the level of severity.

Platform components to be evaluated:

- Login
- Personal information / Child information
- Manage Group
    - invite people
    - define group norms
- Manage Activities
- Messages

Annex 2. Usability testing

The protocol for reporting users observations during usability test can be downloaded on Team Drive:

https://docs.google.com/document/d/1l_JLwdtD6PUQ5wKsBnSpl0THOCcNiXE1uZedYajpbi4/edit

For each task, the note-taker will collect the information related to the dimensions to be investigated that are reported in the data collection template.

Usability Testing | TEMPLATE

[This Template can be used to collect feedbacks during Usability Testing session. For each participant a sheet should be completed. About 4-5 participants should be involved. See D3.1. Session 3.3. for the procedure to be used during Usability testing]

CityLab:

Participant ID: ……………	Date:…………………………	Gender: M F	Observer:……………………………………… Note-taker:………………………………………

Familiarity with technology	Please, rate you familiarity with technology: No experience / Beginner / Average user / Advanced / Expert ○ ○ ○ ○ ○

	Task completion *How user completed the task? (5 point Likert)* 1 = Completed without struggles 5= Not completed, lot of struggles	**Completion time** How long did it took to complete the task?	**Description** How did the task has been performed? (describe the interaction path the user followed to complete the task)	**Criticalities** Describe main issues encountered in terms of: i) understability of information/navigation flow/ UI elements, ii) trust & privacy issues, iii) ….	**Perceived difficulty (SEQ)** Overall, how easy did you find this task? 7 point Likert scale 1= very easy 7= very difficult
Scenario 1. [Add description of the scenario]					
Task 1.1. Log-in					
Task 1.2. Insert					

For the "Criticalities" please refer to Table 3. Heuristics used during heuristic analysis to identify usability issues, described in section 3.2. of this deliverable.

Data collected by the 7 CityLabs will be aggregated using a common digital template (see below)

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For each of the problem identified, the severity is defined, as well as the type of intervention needed to fix it.

None	I don't agree that this is a usability problem at all
Low	This is a quality problem, for example a cosmetic issue or a spelling error. Note: Although this is a minor issue in isolation, too many "lows" will negatively affect credibility and may damage your brand
Medium	This usability problem will make some customers feel frustrated or irritated but will not affect task completion. Fix during the next "business as usual" update
Serious	This usability problem will significantly slow down some customers when completing a common task and may cause customers to find a workaround. Fix as soon as possible
Critical	This usability problem will make some customers unwilling or unable to complete a common task. Fix urgently.

Annex 3. Interviews

Templates for the results of the semi-structured interviews

Date	
City Lab	
Group administrator	Yes/No
Notes of the interviewer in terms of platform *Usability*	Please sum up what emerged from the interview in terms of Usability.
Notes of the interviewer in terms of platform *Usefulness*	Please sum up what emerged from the interview in terms of Usefulness.
Notes of the interviewer in terms of platform *Trust and privacy*	Please sum up what emerged from the interview n terms of Trust and privacy.
Notes of the interviewer in terms of platform *Improvements for the 2nd release*	Please sum up what emerged from the interview in terms of Improvements for the 2nd release.

Annex 4. Focus group

This is the template to be used for collecting focus group data

Date	
City Lab	
Number of parents involved	
Presence of the group administrator	Yes/No
Presence of the community manager	Yes/No
Notes of the interviewer in terms of platform *Usability*	Please sum up what emerged from the focus group in terms of Usability.
Notes of the interviewer in terms of platform *Usefulness*	Please sum up what emerged from the focus group in terms of Usefulness.
Notes of the interviewer in terms of platform *Trust and privacy*	Please sum up what emerged from the focus group in terms of Trust and privacy.
Notes of the interviewer in terms of platform *Improvements for the 2nd release*	Please sum up what emerged from the focus group in terms of Improvements for the 2nd release.

Annex 5. Survey

Technology Acceptance Model (TAM) questionnaire items

Dimensions	Items
Perceived Usefulness (PU)	PU1. Using the Families_Share app helps me to better manage my childcare arrangements. PU2. Using the app enhances the quality of childcare . PU3. I find the app is useful for my family. PU4. Using the app makes it easier to organize childcare arrangements with other parents.
Perceived Ease of Use (PE)	PE1. Getting the information that I want from the app is easy. PE2. I find it easy to organize arrangements with other parents through the app. PE3. Learning to use the app was easy for me PE4. The organization and structure of the app is easy to follow
Attitude Toward Using (AT)	AT1. Organizing childcare arrangements with the Families_Share app is a good practice. AT2. I feel that the service provided by the Families_Share app benefits me. AT3. I feel that the service provided by the Families_Share app benefits my community. AT4. I think it is valuable to use the Families_Share app.
Intention to Use (IN)	IN1. I tend to use the Families_Share app when I had to organize the activities of my children. IN2. In the future, I would not hesitate to use the Families_Share app again. IN3. I would recommend the Families_Share app to my friends. IN4. I would love to use the app for a longer period.
Social diffusion (SD)	SD1. I talked about the Families_Share application with the member of my family. SD2. I talked about the Families_Share application with my friends. SD3. My children are aware about the Families_Share application. SD4. In general, my community has supported the use of the Families_Share application.
Privacy (PR)	PR1. Privacy of my personal data is a concern for me when using Families_Share application. PR2. Privacy of my children data is a concern for me when using Families_Share application. PR3. I think the information stored in the Families_Share application are safely stored. PR4. I think the Families_Share app is secure.

Annex 6. Feedback and reporting form

The form for reporting users feedback can be found at this link

https://goo.gl/forms/JlAGrviu4dbwotH13

Feedback and reporting

This form is used to gather feedback on the application concerning technical and usability issues, feature requests and suggestions.

Type of feedback

◯ Technical issue

◯ Usability issue

◯ Feature request or suggestion

◯ Other: _____

Description
Please provide a description of the issue you found or of the suggestion you have.

Your answer